Solar America Initiative Technology Acceptance Technical Exchange Meeting Washington, DC June 12, 2006

Infrastructure Development Breakout Group A: Codes, Regulations, and Standards
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In what aspects are U.S. codes and standards the most deficient?

- There is a lack of uniformity across states and municipalities.
- There is not enough federal guidance for states and municipalities in setting standards.
- There is conflict between a component-based approach versus a system-based approach.
- It is difficult for standards-makers to keep up with rapid changes in technologies.
- There is a need to create proper incentives for industry, customers, regulators, utilities to participate in standards-setting process.
- <u>ISSUE/NOT DEFICIENCY</u>: The timeline for process of setting standards is often too long for the rapid solar industry growth envisioned under the Solar America Initiative.

What new codes are needed? Are there communications issues with existing codes?

- As multi-MW installations become more common, power flow codes and standards will be needed. The Solar America Initiative can be vehicle for creating case studies of best practices for power flow standards and disseminating them.
- There is a need for better standards for data acquisition and monitoring of power output, especially as the renewable energy credit market grows.

Below are not new codes but what may be part of the initiative:

- A valuable service would be disseminating information on states/municipalities
 with successful codes and standards, such as New Jersey and California; this
 could be done via the Department of Energy's website; the Solar America
 Initiative would be a strong vehicle for disseminating these model standards,
 facilitating adoption of these standards by other states and municipalities.
- Having the Department of Energy highlight best practices for codes and standards would give credibility to these practices, giving customers, installers, project developers, and utilities greater confidence in solar technologies, leading to greater market penetration.

How can the Solar America Initiative best accelerate the adoption of uniform codes and standards?

- Give utilities, industry, and customers an incentive to participate in the standardsetting process. The opportunity to participate in creating a model of best practices that will be disseminated to and adopted by states and municipalities is a strong incentive. In turn, if all interested parties are involved, the model of best practices will have greater credibility.
- Integrate with International Electrotechnical Commission codes and standards.
- Codes and standards should be viewed in terms of how they can be used to promote the solar market.
- Emphasize disseminating information on existing, best practice codes and standards, and then on developing new standards that are needed to fill in gaps that are not covered by existing standards.
- Focus on codes and standards on which the Department of Energy can have the most leverage.

What level of funding is needed?

- 10% of total increase, leveraged equally with contributions from states and others.
- Work with an EXTERNAL communications expert to effectively disseminate model codes and standards.
- Better integrate money that is being spent by other offices in the Department of Energy, such as in the buildings or electricity office.